

Work Order ID 152421

Monday, October 24, 2016 11:40:50 AM

152421

Page 1

Item ID: D4930-1

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Bearpaw

Start Date: 10/14/2016 Start Qty: 4.00

4

Cust Item ID:

Required Date: 10/24/2016 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals: Process Plan: DAS 21 Date: OCT 24 2016

Tooling:

Date:

Run Start ***NR1***QC: 9-89

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

D4930

B

110

0.00

110

FLOW WATER JET

Waterjet

Memo

0.14

FLOW CNC Waterjet

CUT BLANK AS PER FILE D4930-1 BLANK

(4)

16/10/27

120

0.19

120

HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.35

HAAS CNC vertical machine #1

1-Inspect material for defects or damage prior to machining

2-Machine as per Folio FB217 and Dwg

FOLIO REV: 11DWG REV: B

3-Deburr

4

2

DAS
33
9-89

16/11/07

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation		Disposition			
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
		OTHER :			

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
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Work Order ID 152421

Monday, October 24, 2016 11:40:50 AM

152421

Page 3

Item ID: D4930-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Bearpaw

Start Date: 10/14/2016 Start Qty: 4.00

4

Cust Item ID:

Required Date: 10/24/2016 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

NR1

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

QC21- Final Inspection - Work Order Release

0.00

160

QC

Memo

0.07

DAS
21
9-29

NOV 11 2016

Quality Control

DAS
21
9-29

NOV 11 2016

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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		OTHER : ☐ _____							

Picklist Print

Monday, October 24, 2016 11:40:49 AM

Page 1

Work Order ID: 152421

152421

Parent Item: D4930-1

D4930-1

Parent Item Name: Bearpaw

Start Date: 10/14/2016

Required Date: 10/24/2016

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP REV:A NEW ISSUE 13-10-07 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MUHMWB10		Purchased			No		sf	454.0000		5.326316			

MUHMWB10

UHMW 1" Black - 48"x120" Tivar Mfg.#52480104

OK 10/10/27

Location

Loc Qty

Loc Code

MAT

40

m135497

40

MAT018

414

m135013

14

m135913

400

6

DQA: _____ Date: _____

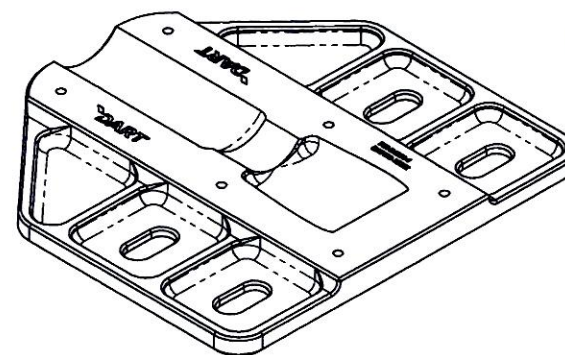
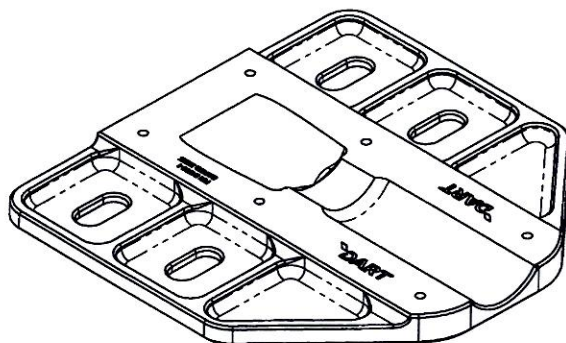


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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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		OTHER : ☐							



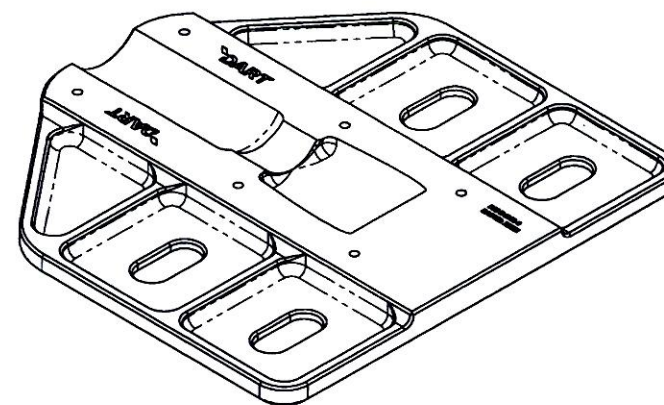
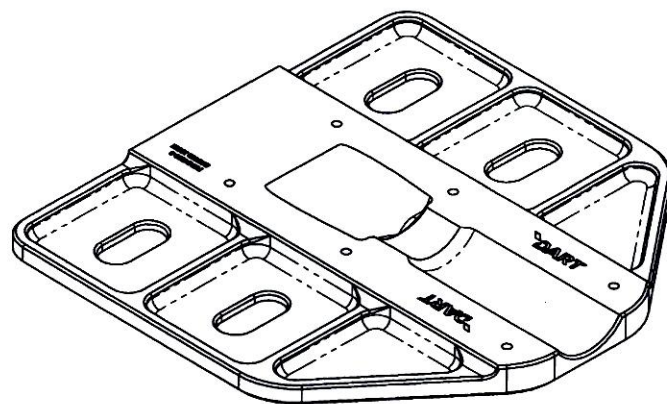
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 152421 MJS

101024

RELEASED
2013-12-12

D4930-1 BEARPAW

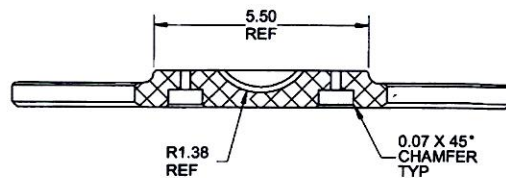
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	CHECKED	HS	DRAWING NO.	REV. B
	MFG. APPR.	JLM	D4930	SHEET 1 OF 8
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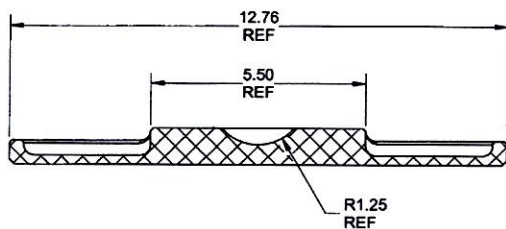
D4930-3 BEARPAW

RELEASED
2013-12-12
ND

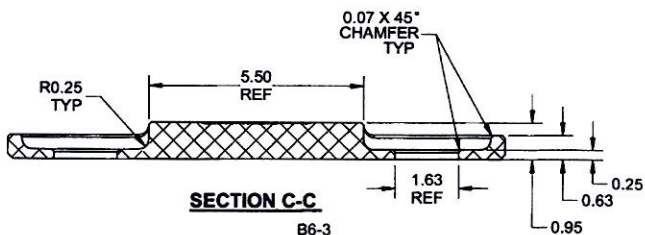
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	CHECKED	HS	DRAWING NO.	REV. 8
	MFG. APPR.	JLM	D4930	SHEET 2 OF 6
	APPROVED	HS	TITLE	SCALE
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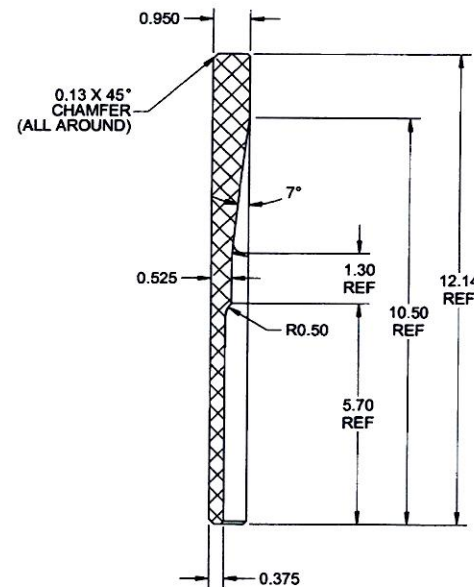
SECTION A-A
B6-3



SECTION B-B
C6-3



SECTION C-C
B6-3



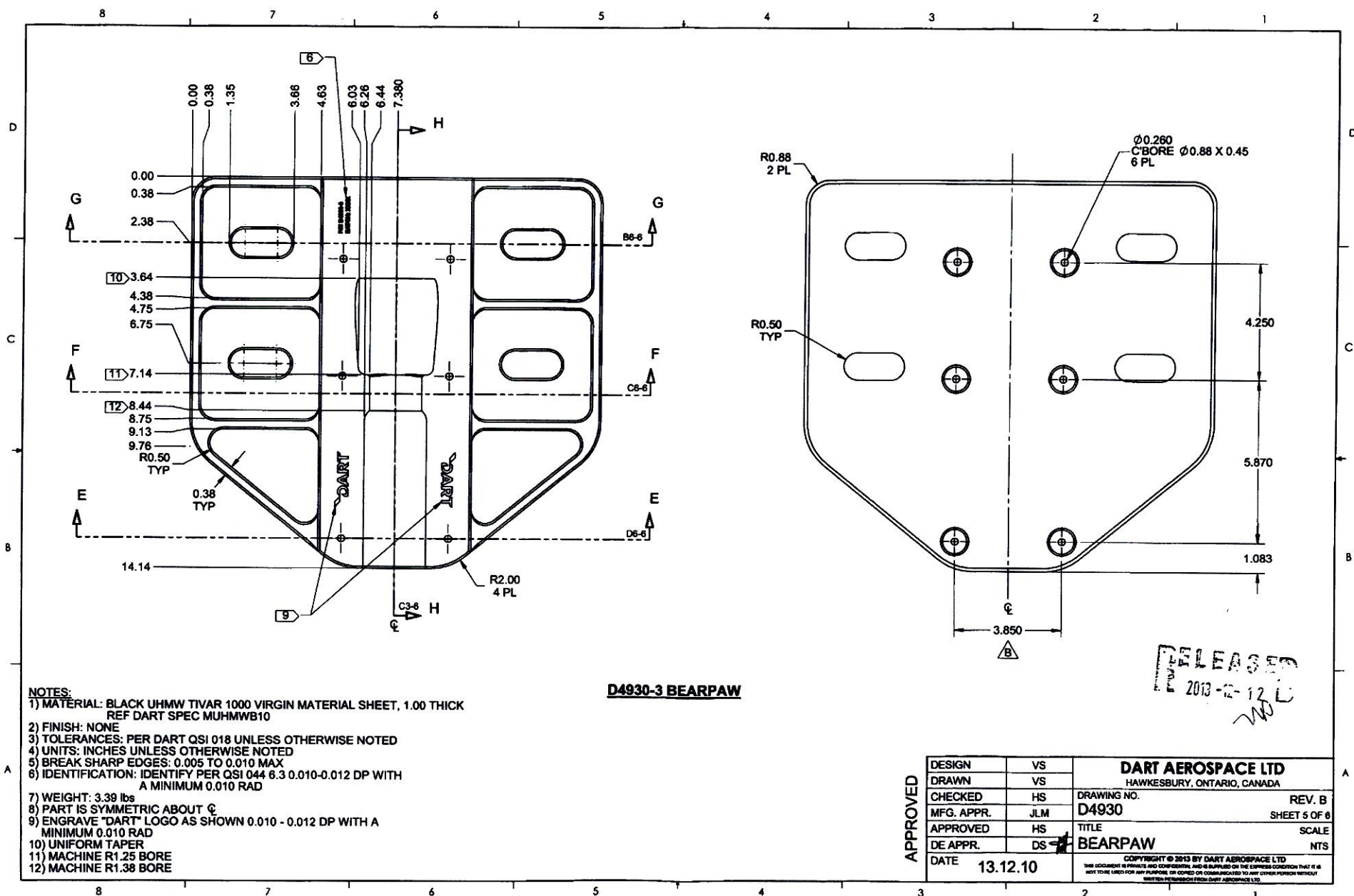
SECTION D-D
C6-3

D4930-1 BEARPAW

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2013-12-12

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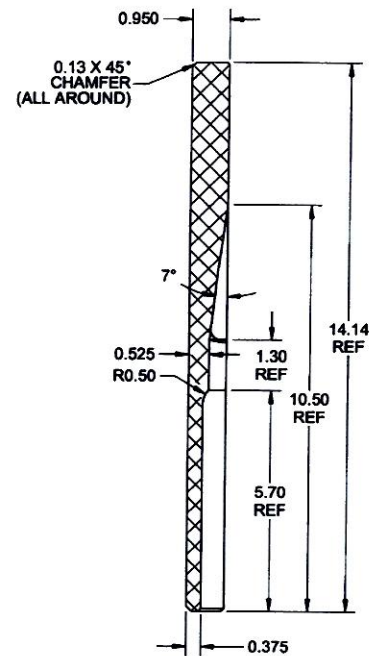
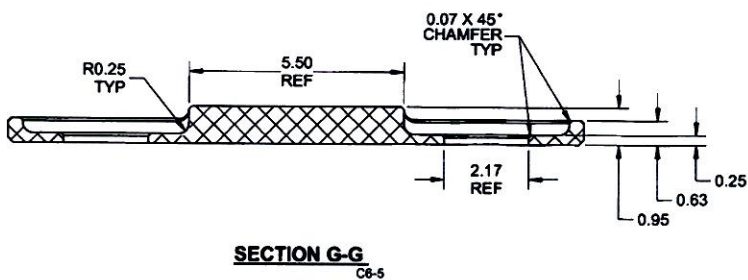
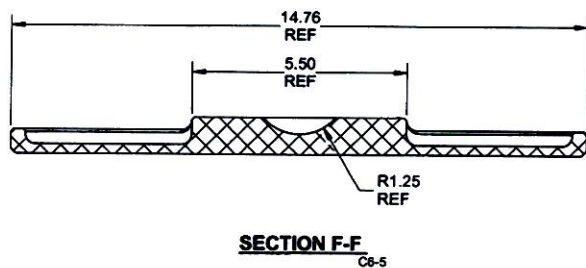
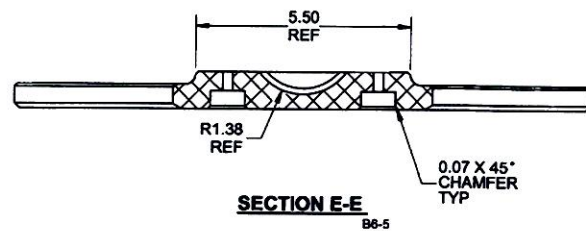


D4930-3 BEARPAW

- NOTES:**
- 1) MATERIAL: BLACK UHMW TIVAR 1000 VIRGIN MATERIAL SHEET, 1.00 THICK
REF DART SPEC MUHMB10
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.3 0.010-0.012 DP WITH
A MINIMUM 0.010 RAD
 - 7) WEIGHT: 3.39 lbs
 - 8) PART IS SYMMETRIC ABOUT C
 - 9) ENGRAVE "DART" LOGO AS SHOWN 0.010 - 0.012 DP WITH A
MINIMUM 0.010 RAD
 - 10) UNIFORM TAPER
 - 11) MACHINE R1.25 BORE
 - 12) MACHINE R1.38 BORE

RELEASED
2013-02-12

DESIGN	VS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
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D4930-3 BEARPAW

APPROVED

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MFG. APPR.	JLM
APPROVED	HS
DE APPR.	DS
DATE	13.12.10

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DRAWING NO. D4930	REV. B SHEET 6 OF 6
TITLE BEARPAW	SCALE NTS
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2013-12-12